Policy Committee of the

Chesapeake Bay Local Assistance Board

Tuesday, May 3, 2005
Division Conference Room
James Monroe Building
101 North 14th Street, 17th Floor
Richmond, VA 23219

Members Present

Mr. David L. Bulova
Mr. Donald W. Davis, ex-officio
Mr. William E. Duncanson
Ms. Beverly D. Harper

Members Not Present

Mr. Walter J. Sheffield

Staff Present

C. Scott Crafton, Acting Director, Division of Chesapeake Bay Local Assistance
Roger Chaffe, Office of the Attorney General
David C. Dowling, Policy, Planning and Budget Director
Shawn Smith, Principal Environmental Planning
Martha Little, Chief of Environmental Planning
Christine Watlington, Policy and Planning Analyst
Michael R. Fletcher, Director of Development

Others Present

James Freas, City of Hampton
Lee Rosenberg, City of Norfolk
Keith Cannady, City of Norfolk
Stewart Leeth, McGuire Woods

Call to Order – Roll Call

Mr. Duncanson called the meeting to order and asked for the calling of the roll. A quorum was declared present.

Mr. Duncanson asked memers and guests to introduce themselves.

Mr. Duncanson called on Mr. Crafton to give a recap of the April 22nd meeting.

Mr. Crafton noted that staff had distributed a number of white papers for information. Mr. Crafton said he would provide follow up on the issues as discussed.

Stream and wetland restoration projects as Water Dependent Activities

Mr. Crafton said that a guidance letter sent under his signature had informed localities that they may consider stream and wetland restoration projects as water dependent activities. He said that the question now was, should this remain in the guidance documents or should it be put into the regulations.

He noted that it was suggested that the existing guidance document could be edited to recognize these types of projects. He said that, while it was not in final form, the suggested change was that water dependent uses would be changed to water dependent facilities or activities.

A copy of the guidance document entitled "Resource Protection Areas: Permitted Development Activities" is available from the Department of Conservation and Recreation.

Mr. Crafton reviewed the proposed edits. He noted that there were ways to include this in the regulations if that was the preference of the Board. However, staff has not as yet attempted to do so.

Mr. Davis said that perhaps it would be appropriate if the regulations were amended in future actions. He said that, subject to the date of the next policy committee meeting, this matter could be bought before the entire board at the next meeting.

Marina components as Water Dependent Facilities

Staff background information on Marina components as Water Dependent facilities is provided in Attachment #1.

Mr. Crafton discussed a survey of localities with marinas. He said that about fourteen or fifteen local governments have a lot of marina activity. The summary of this was that within the 17 localities listed there were about 190 existing marinas. They range in size from a dozen to over 200 slips.

Mr. Crafton said that based on the review of these localities, the concern that has been raised does not seem to be an extensive problem.

He noted that over 1,000 marinas are eligible for the Clean Marina designation. At this time 22 have secured the designation and an additional 30 have pledged to work towards that.

Mr. Crafton said that one idea is that in negotiations, for marina expansion exceptions, more flexibility might be considered if marinas commit to upgrade and get certified as a clean marina.

Mr. Davis said that he recently visited two marinas with the designation. He noted obvious improvements. He said the Board should strongly support the program.

No members of the public were on hand to discuss marinas.

Mr. Davis said that he would share this information with the association of marina owners.

Mr. Bulova said that he had concerns for the marinas discussed. He said that small marinas have no place to expand if they want additional parking or other amenities. He noted that there were competing interests in expanding the marina while not being able to expand the amenities.

Mr. Davis said that some marina owners believe these issues go hand in hand. He said that he believed the issue should be monitored over time to determine how best to handle it.

Mr. Duncanson noted that quite often marina owners were not the ones running the restaurants.

Definition of "Water Body with Perennial Flow" and Associated Issues

Mr. Crafton referenced a white paper titled "Water Bodies with Perennial Flow Definitions." A copy of this paper is attached as Attachment #2.

Mr. Crafton said that the issue is whether or not this definition should be included in the regulations. He noted that a number of localities already include this definition in their ordinances. The attachment provides a list of localities, with notes if they include a definition and whether or not it conforms to the state definition.

The majority of localities have not included this definition.

Mr. Crafton said that training was provided in 2004 that was targeted to local government. He noted that Chesterfield County is preparing to hold training.

Mr. Crafton distributed a document summarizing North Carolina's buffer rules as they pertain to perennial streams. A copy is attached as Attachment #3.

Mr. Belo reviewed the attachment. He noted that Maryland based their program on a tidal wetland survey done in 1979. The state established a critical area as 1,000 feet from critical waters. The state did the mapping and gave the program to local governments. He noted that everything below the fall line was considered a "critical area."

Mr. Belo noted that North Carolina buffers both intermittent and perennial streams.

Clarification of Intensely Developed Area Criteria

Mr. Crafton noted that staff was not asked to do any follow-up on this issue. He said that the staff proposal tried to separate the concerns and issues.

He noted that what has been historically approved as IDAs had more impervious cover and were more intensely developed.

Septic system requirements

The document "Consideration of Alternative Septic Systems" is attached as Attachment #4.

Mr. Crafton said the issue to consider was whether to require advance treatment systems. The concern is that rather than risk system failure on a fragile site, perhaps the Board should consider regulations for a more treatment intensive alternative system.

Mr. Crafton noted that with the alternate drainfields, not as much land area is used for primary and reserve drain fields.

He noted that the burden with the alternate systems is the annual notification to switch drainfields.

Mr. Davis noted that many localities do not allow alternative systems.

Stormwater Management

Mr. Crafton said that the question had to do with the siting of BMPS down in the RPAs and the buffers. The regulations that say local government must have Board approval of a regional stormwater management plan in order to do so.

Ms. Little noted that reviews of local stormwater management programs are currently handled by the Division of Soil and Water Conservation.

Mr. Dowling noted that the regulations can mimic some of the same language or the regulations could speak to BMPs. He indicated that at this point it is not clear which Board would have the authority to offer the variances.

New briefing paper on Issues Regarding Nonconforming Residential Lots

Ms. Little discussed the briefing paper on Issues Regarding Nonconforming Lots. A copy of that paper is attached as Attachment # 5.

Ms. Little said that the issue is non-residential lots that were non-conforming before the Bay Act. She said that there is a renewed interest in designating IDAs because of the burden of the formal exception process.

The briefing paper outlines four different alternatives:

1. Develop a new Residential Buffer Exemption Area (BEA) policy that would allow local governments to exempt portions of the Resource Protection Areas (RPA) from the building setback restrictions and buffer vegetation protection requirements included in the development criteria for the RPA (9 VAC 10-20-

130) and the public notification and public hearing requirements included for exceptions (9 VAC 10-20-150). BEA approval would be based on the local government's ability to demonstrate that existing patterns of residential development in proposed BEAs prevents the buffer from properly functioning now and in the foreseeable future. BEA approval would be contingent upon the Board's approval of local mitigation policies that achieve equivalent water quality protection in the form of riparian buffer plantings, offsets, and fee-in-lieu programs.

2. Allow administrative review and approval of encroachments into the seaward 50-feet of the buffer area through the "permitted encroachments into the buffer area" (10-20-130 4) for the construction or expansion of principal and accessory structures on developed pre-Bay Act lots. The applicant would be required to demonstrate that there is no feasible alternative for minimizing or avoiding buffer encroachment. Administrative approval would be based, in part, upon the restoration of riparian buffer vegetation and/or other appropriate mitigation for water quality protection. Newly developed lots would not qualify.

3. Allow an administrative review and approval process through a new exceptions process (10-20-150) for the placement of accessory structures in the RPA on developed pre-Bay Act lots. The applicant would be required to demonstrate that there is no feasible alternative for minimizing or avoiding buffer encroachment. Administrative approval would be based, in part, upon the restoration of riparian buffer vegetation and/or other appropriate mitigation.

4. Retain existing IDA regulations. Reassess the need for additional regulatory relief for nonconforming lots at a later date.

Mr. Crafton said that the desire was to continue to have functional buffers where possible.

Mr. Bulova asked the representatives from Hampton Roads what the driving issue was for property owners.

Mr. Cannady said it was a consideration of whether it was worth the time and energy. He said the other issue was that zoning is affecting property value. He noted that Norfolk is looking for conformity in the zoning ordinance.

Next steps

Mr. Bulova commended staff for putting the information together quickly.

Mr. Davis noted that these were great starting points for discussion, but that there was a lot of work to do.

Mr. Davis suggested that staff look at the middle part of July for the next meeting.

Public Comment

There was no public comment.

Adjourn

There being no further business, the meeting was adjourned.

Attachment #1

Expansion of Existing Marinas

City of Virginia Beach - 14 marinas listed in 1990 Chesapeake Bay Area Public Access Plan

1. Relocation of a bait and tackle shop within the RPA. It was treated as new development, went before the Board, and all stormwater from the entire site had to be treated.

City of Suffolk – 4 marinas listed in 1990 Chesapeake Bay Area Public Access Plan. No expansion of existing marinas has been requested. City staff stated that they would require any non-water dependent component to be located outside of the RPA.

City of Portsmouth – 8 marinas listed in 1990 Chesapeake Bay Area Public Access Plan. No requests for expansion or new in last year.

1. In 9 years, only one request - Marina parking lot request, processed through formal process by Planning Commission, approved but not constructed.

City of Norfolk – 14 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. One project in last several years where marina was expanded into the RPA buffer. Site was in IDA and considered redevelopment with required stormwater management reducing the post-development pollution load by 10 percent.

Westmoreland County – 20 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. One request for expansion of non-water dependent component – large building (30'-80', two story structure) in RPA, on 70 acre lot. Currently under review, County is saying building for shower/bath and office is not water dependent.
2. One request is expected, to expand some of parking area on small marina (2-3 acres), request will be processed through exception request when submitted.

Northumberland County – 16 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. No recent land expansion, most have been to expand number of slips and most have considerable amount of existing impervious cover.
2. One case some years back, where a marina sought to expand existing ship's store. Project was approved.

Lancaster County - 16 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Only recent issue related to the rezoning of several parcels around an existing marina and the development of boat storage on part of these rezoned parcels,

where impervious cover previously existed. Marinas are described in general as already highly impervious with compacted gravel.

Stafford County – 6 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Recent approval of indoor boat storage in RPA. Grading plans considered by County to be "vested" as site plan was approved prior to Bay Act ordinance adoption.

King George County – 5 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. No marinas have requested expansion. Boat ramp facility is under review, and County is requiring all non-water dependent facilities to be located outside RPA.

Essex County (includes Town of Tappahannock)– 5 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Non-water dependent structure required to be located outside RPA
2. Tappahannock – redevelopment within same footprint of hurricane damaged structure; demolition of dilapidated structure, no replacement and one new non-water dependent structure outside of RPA.

Gloucester County – 9 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. No requests for expansion of existing marinas in recent years.

Mathews County – 21 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Restroom considered redevelopment as it was built over existing building footprint.

Middlesex County (includes Town of Urbanna) – 35 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Industrial marine construction was considered as water dependent and built over existing railway.
2. Urbanna – Town-owned marina redeveloped within existing impervious cover.

Town of West Point, located in King William County – 2 marinas listed in 1990 Chesapeake Bay Area Public Access Plan. No requests for non-water dependent expansion.

York County – 6 marinas listed in 1990 Chesapeake Bay Area Public Access Plan.

1. Few years ago (3-4) expansion of parking spaces into RPA was approved as an exception by BZA for one marina. (Goodwin Island Marina)
2. Dare Marina – several years ago requested development of restaurant, expansion of boat storage and around 9 new parking spaces. County negotiated with marina and tentatively approved the restaurant as a redevelopment project given its location over existing impervious cover

(Division staff visited site and confirmed location of impervious cover); the expansion of boat storage as expansion of noncomplying structure with some design caveats (no further encroachment into RPA, limited amount of impervious cover for access to storage); and agreed to administratively approve the 9 new parking spaces. Marina did not move on this plan, and has recently come back in with a new plan, one that shows complete site development, nearly completely impervious. County has agreed to allow the marina to develop plan that was submitted and approved a few years ago, as outlined above, but marina has indicated that the previous plan is not economically viable anymore.

Conclusion:

Within the 167 localities listed above, there are probably around 190 existing marinas, ranging in size from a dozen or so slips to over 200 slips. Of these 190 or so marinas, requests for expansion of "non water-dependent" components has been very small (11 requests), and in fact, the vast majority of these marinas were not expanded at all in the last several years. Of the 11 requests for non water dependent components, 4 such requests were considered as redevelopment; one was required to be located outside of RPA, and 3 were reviewed through an exception process, all of which were approved. Redevelopment or reconstruction within same footprint of damaged marinas was allowed in two instances, and one instance was considered to be "vested" and permitted without any formal exception approval. There are two proposals currently under review, and the final outcome of these is not yet known.

Based on the survey of these 17 localities, the expansion of existing marinas has not been a particularly perplexing issue, and all appear to be aware of the limitations of placement of non water dependent components in the RPA and none of the requests for such expansions have been completely denied.

Attachment #2

Water Bodies with Perennial Flow Definitions

Locality	Definition	Conform?
ANPDC		
Accomack County	No	n/a
Northampton County	No	n/a
Town of Belle Haven	No	n/a
Town of Bloxom	No	n/a
Town of Cape Charles	No	n/a
Town of Cheriton	No	n/a
Town of Eastville	No	n/a
Town of Exmore	Yes	Yes
Town of Melfa	No	n/a
Town of Nassawadox	No	n/a
Town of Onancock	No	n/a
Town of Onley	No	n/a
Town of Painter	No	n/a
Town of Parksley	No	n/a
Town of Saxis	No	n/a
Town of Tangier	No	n/a
Crater PDC		
City of Colonial Heights	No	n/a
City of Hopewell	No	n/a
City of Petersburg	No	n/a
Prince George County	No	n/a
Surry County	No	n/a
Town of Claremont	No	n/a
Town of Surry	No	n/a
HRPDC – Southeastern		
City of Chesapeake	No	n/a
City of Norfolk	Yes	**No**
City of Portsmouth	Yes	Yes
City of Suffolk	No	n/a
City of Virginia Beach	Yes	**No**
Isle of Wight County	Yes	**No**
Town of Smithfield	Yes	Yes
Town of Windsor	No	n/a

HRPDC – Peninsula

City of Hampton	No	n/a
City of Newport News	No	n/a
City of Poquoson	No	n/a
City of Williamsburg	No	n/a
James City County	No	n/a
York County	No	n/a

MPPDC

Essex County	No	n/a
Gloucester County	No	n/a
King and Queen County	No	n/a
King William County	No	n/a
Mathews County	Yes	Yes
Middlesex County	Yes	**No**
Town of Tappahannock	No	n/a
Town of Urbanna	No	n/a
Town of West Point	Yes	Yes

NNPDC

Lancaster County	Yes	**No**
Northumberland County	No	n/a
Richmond County	No	n/a
Westmoreland County	No	n/a
Town of Colonial Beach	No	n/a
Town of Irvington	No	n/a
Town of Kilmarnock	No	n/a
Town of Montross	No	n/a
Town of Warsaw	No	n/a
Town of White Stone	Yes	**No**

NVRC

City of Alexandria	Yes	**No**
City of Fairfax	Yes	**No**
City of Falls Church	No	n/a
Arlington County	No	n/a
Fairfax County	Yes	**No**
Prince William County	No	n/a
Town of Clifton	No	n/a
Town of Dumfries	No	n/a
Town of Haymarket	No	n/a
Town of Herndon	Yes	**No**
Town of Occoquan	No	n/a

Town of Quantico	No	n/a
Town of Vienna	Yes	**No**

RADCO

City of Fredericksburg	No	n/a
Caroline County	Yes	Yes
King George County	No	n/a
Spotsylvania County	No	n/a
Stafford County	No	n/a
Town of Bowling Green	No	n/a
Town of Port Royal	No	n/a

RRPDC

City of Richmond	No	n/a
Charles City County	No	n/a
Chesterfield County	Yes	Yes
Hanover County	No	n/a
Henrico County	No	n/a
New Kent County	No	n/a
Town of Ashland	Yes	Yes

Alternative definitions:
perennial flow: a continuous flow of water – *Lancaster and White Stone*

Same as Guidance Document with additional sentence: "The width of the perennial stream extends from top-of-bank to top-of-bank of the channel or to the limits of the normal water level for a pond or lake when there is no definable top-of-bank. Acceptable methodologies for establishing thte presence of a water body with perennial flow will be provided by the Director of T&ES pursuant to Sec. 13-104(C)." – *Alexandria*

"*Water body with perennial flow*" means a body of water flowing in a natural or man-made channel year-round, except during periods of drought. The term "water body with perennial flow" includes perennial streams, estuaries, and tidal embayments. A perennial stream means any stream that is both perennial and so depicted on the map of Chesapeake Bay Perservation Areas adopted by the Board of Supervisors pursuant to Section 118-1-9(a). Streams identified as perennial on the adopted map are based on field studies conducted by the Dept. of Public Works and Environmental Services. Lakes and ponds that form the source of a perennial stream, or throught which the perennial straeam flows, ar a part of the perennial stream. The width of a perennial stream may be measured from top-of-bank to top-of-bank or at the Ordinary High Water Mark (OHWM) as defined by 33 CFT Part 328.3(e). The aerial extent of a pond or lake is measured at the OHWM. Generally, the water table is located abovbe the streambed for most of the year and groundwater is the primary source for stream flow. In the absence of pollution

or other manmade disturbances, a perennial stream is capable of supporting aquatic life. – *Fairfax County; Herndon and City of Fairfax have definitions close to Fairfax County*

"A well-defined channel that contains water year-round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for the perennial stream, but it also carries stormwater runoff. A water body with perennial flow exhibits the typical biological, hydrological, and physical characteristics assoicated with the continuous conveyance of water. Generally, the Town will consider a water body to have perennial flow if it is depicted as a perennial stream on the most recent U.S. Geological Survey 7 ½ minute topographic quadrangle map (scale 1:24,000)." - *Vienna*

Perennial stream – those streams connected to rivers by a continuous flow and therefore are tributaries to these rivers. Perennial streams are depicted as solid blue or purple lines on the most recent U.S. Geological Survey 7 ½ minute topographic quadrangle maps. – *Middlesex County*

Water body with perennial flow – means a body of water that flows in a natural or man-channel year-round during a year of normal precipitation. – *City of Norfolk*

Waterbodies with perennial flow – any water body depicted as perennial based upon (i) the most recent U.S. Geological Survey 7 ½ minute quadrangle map (scale 1:24,000) or (ii) use of scientifically valid system of in-field indicators of perennial flow made or confirmed by the City Manager. – *City of Virginia Beach*

Water Body with Perennial Flow – definition in Guidance Document, plus the following: Perennial flow can be inferred by the presence of biological indicators, benthic macroinvertebrates that require water for entire life cycles, or by using an approved determination protocol. – *Isle of Wight County*

Summary of "water body with perennial flow" definition for Tidewater localities

There are 84 local governments in Tidewater, subject to the Bay Act. Of these 84 localities, 19 chose to include a definition for either "water body(ies) with perennial flow", "perennial stream" or "perennial flow." Of these 19, the 11 included definitions that do not conform 100 percent with the definition in the Board's September 2003 guidance "Determinations of Water Bodies with Perennial Flow." The variations range from inclusion of the verbatim definition plus an additional phrase (2 localities), tracking the language in 9 VAC 10-20-80 D, and combinations of language from the guidance or simple definition, etc.

Attachment #3

North Carolina - Neuse and Tar-Pamlico River Basin Riparian Buffer Rules

Summary

In order to "protect and preserve existing riparian buffers to maintain their nutrient removal functions" 50-foot wide riparian buffers are required adjacent to all surface waters including intermittent streams, perennial streams lakes, ponds and estuaries. This Rule only applies to the Neuse and Tar-Pamlico River Basins[1]. The Division of Water Quality administers the program unless a local government requests that it be delegated program administration responsibilities. Delegation is contingent upon the Division's approval of program administration. To date only one local government administers its own program (Orange County – ***?is this still true?***).

A protected surface water is present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the NRCS or the most recent version of the USGS topographic map (1:24,000 scale). Riparian buffers adjacent to surface waters that do not appear on either of the maps are not subject to the Rule.

If a landowner believes that the maps have inaccurately depicted surface waters, he/she can request that the Division of Water Quality or the appropriate delegated local authority make an on-site determination. The Rule does not apply to:

1. Ditches and manmade conveyances other than modified natural streams unless constructed for navigation or boat access.
2. Manmade ponds and lakes that are located outside of natural drainage ways.
3. Ephemeral (stormwater) streams.

Definitions:

"Perennial Stream means a well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water." (Neuse and Tar-Pamlico River Basin Riparian Buffer Rules)

"Ditch – 'Ditch or canal' means a man-made channel other than a modified natural stream constructed for drainage purposes that is typically dug through inter-stream divide areas. A ditch or canal may have flows that are perennial,

[1] There are other buffer rules in North Carolina that are not discussed below including rules for: Randleman Lake Watershed, Catawba River Basin, classified waters (water supplies, trout waters, etc.), and local ordinances. Most of these are variations on the Neuse and Tar-Pamlico Rules.

intermittent, or ephemeral and may exhibit hydrological and biological characteristics similar to perennial or intermittent streams." (Neuse and Tar-Pamlico River Basin Riparian Buffer Rules)

On-site Determination Methods:

Identification Methods for the Origins of Intermittent and Perennial streams, Version 3.1 (effective February, 28, 2005) – drafted by the North Carolina Division of Water Quality.

According to the North Carolina on-site determination method, a stream channel is perennial when any of the following criteria are met:

1. Biological indicators such as fish, crayfish (in channel), amphibians (larval salamanders and large, multi-year tadpoles), or clams are present. If only crayfish or fingernail clams are present, a numerical value of at least 18 on the geomorphology section of the most current version of the DWQ stream classification form is required.

OR

2. A numerical value of at least 30 points is determined from the most recent version of the DWQ stream identification form.

OR

3. More than one benthic macroinvertebrate that requires water for entire life cycles are present as later instar larvae4. A list of the benthic organisms commonly collected by DWQ biologists during perennial stream determinations are shown in Tables 5 and 6 of Version 3.1.

DWQ staff suggest that a stream be examined using these three criteria in the sequence above – namely, a field examination should first look for criterion 1 and then criterion 2. If the channel does not meet either of these two criteria and the field biologist believes the channel to be perennial, then the third criterion should be utilized – however identification by a well-trained aquatic entomologist is required for the proper use of this criterion. In most instances, the use of either of the first two criteria should be sufficient to make a stream determination.

Reduced topography, which causes fewer channel forming features, can make the geomorphology section of the stream form problematic in the Middle Atlantic Coastal Plain – approximately east of I-95. In this area, biology should take precedence over geomorphology for determining a stream. Therefore the criteria should be utilized in the following sequence: 1, 3, and then 2.

Perennial identification certification requirements:

In 2001, HB 1257 established a ***Surface Water Identification Training and Certification Program*** as a component of the riparian buffer protection program. This bill required the Division of Water Quality to develop a program to train and certify individuals to determine the presence of surface waters that require riparian buffer protection. The Division may train and certify employees of the Division of Water Quality; employees of units of local government to whom responsibility for the implementation and enforcement of the riparian buffer protection rules is delegated; and employees of the Division of Forest Resources of the Department who are Registered Foresters. The Director of the Division of Water Quality may review the determinations made by individuals who are certified pursuant to this section, may override a determination made by an individual certified under this section, and, if the Director of the Division of Water Quality determines that an individual is failing to make correct determinations, revoke the certification of that individual.

Attachment #4

CONSIDERATION OF ALTERNATIVE SEPTIC SYSTEMS

Issue(s): The question that has been raised is whether the Regulations that pertain to the reserve drainfield requirement for lots plated prior to October 1, 1989 should be amended to require installation of a more advanced on-site sewage treatment system as one condition to allow the reserve area to be waived. This revision has the potential to provide greater water quality protection than what may be currently accorded.

Background: Section 9 VAC 10-20-120 (7) (b) of the Regulations requires, for new construction, a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site. The reserve site is not required for lots applied prior to October 1, 1989 if there is not sufficient capacity to accommodate a reserve area as determined by the local health department.

As an option to the 100% reserved drainfield site, local governments may allow property owners to install two alternating drainfields with each drainfield equal to at least 50% of the area that otherwise would be required. Several other criteria must also be met including installation of a flow diversion valve that must be switched annually to allow a "resting period" for the drainfield not in use.

Discussion: The reserve drainfield area requirement for lots plated prior to October 1, 1989 is often waived by the local Health Department as a result of insufficient area. Many of these lots are limited in size and were created without consideration for a reserve drainfield area. It has been suggested that for these lots, which cannot accommodate a reserve site, a more advanced on-site sewage treatment be required to be installed instead of the conventional septic system. This revision would have several water quality benefits. First, the more advanced treatment system may provide a greater degree of removal of some water quality contaminants, especially microorganisms, since a higher quality effluent is introduced into the soil matrix. Second, the likelihood of on-site system failure is reduced because the more advanced systems require maintenance agreements either with the manufacturer or local Health Department. These agreements include routine inspection that may identify potential problems before the system fails. Finally, should the advanced treatment system fail, the repair most likely will be better able to meet any new water quality standards that may be required in the future. This is because advanced treatment systems may be more easily re-engineered to accommodate new standards than the tradition septic system.

There are, however, several potential difficulties that might arise with implementation of this revision should it be approved. First, this practice may pose a financial hardship for

some property owners. Lots that are located inland are typically less expensive than lots on or near water and may be owned by persons who cannot afford installing a more advanced treatment system which is typically more expensive than the conventional system. Second, localities have the option of allowing alternating drainfields in lieu of the reserve. For lots that cannot accommodate a reserve area, installation of alternating drainfields is a viable option that would provide equivalent water quality protection as installation of primary system with dedicated reserve area. If this option is pursued, cost would most likely not be a factor since the installation of alternating drainfields should only be slightly more expensive than installing a single drainfield. The local government would be required, however, to notify the property owner annually to switch the flow diversion valve and this notification may be considered an administrative burden to some localities. Finally, the question of equity would need to be further examined. The potential revision may be viewed as "unequal treatment under the law" since these properties have sites that otherwise would qualify for the less expensive and more maintenance intensive, conventional septic system.

Alternatives:

1. Maintain existing Regulations for requirements of reserve drainfield area for on-site sewage treatment systems.
2. For lots that cannot accommodate a reserve area, require installation of an advanced treatment system as one condition to the waiver.

Attachment #5

NONCONFORMING RESIDENTIAL LOTS

Issue:
Many older, urban Tidewater communities are characterized by RPA buffers that may have significant areas of impervious surface, heavily armored shorelines, and have little or no riparian vegetation other than turf grass. The Bay Act Regulations regarding IDAs do not currently differentiate between degraded urban buffers and natural riparian forest buffers. Certain localities have suggested that this places a substantial and unwarranted burden upon both urban local program staff for the administration of exception requests and owners of urban, nonconforming residential lots for the difficulties with expanding residential uses into the buffers.

Background:
The adoption of local Chesapeake Bay Preservation Act programs in the early 1990s resulted in a significant number of nonconforming lots in older, urban communities. (For example, the City of Hampton estimates that it has over 5000 nonconforming lots). Most of these nonconforming lots are less than an acre in size with either the entire lot, or a substantial portion of the lot, in the RPA. The current Bay Act regulations require public notification and a public hearing for construction of new or expanded accessory structures in the RPA and for tearing down and rebuilding of larger principal structures within the seaward 50-feet of the RPA on small nonconforming lots. It has been suggested that these provisions of the current Bay Act Regulations to protect severely degraded RPA buffers on small, nonconforming lots requires an inordinant amount of staff time and applicant expense – especially in older, high-density, urban communities.

Discussion:
The Department has recently received applications from some urban Tidewater localities for the expansion of Intensely Developed Area (IDA) designations in areas characterized by residential land uses. The local governments proposing IDA expansions see it as a tool to reduce the administrative challenge of enforcing the Regulations in their older communities dominated by nonconforming single-family lots.

IDAs, traditionally, have been intended to encourage the redevelopment of areas that produce substantial amounts of nonpoint source pollution due to expansive impervious surfaces and a lack of RPA buffer vegetation. Redeveloping these areas according the Bay Act regulations can improve and protect water quality by reducing the amount of impervious surface, restoring RPA vegetation to the site and incorporating the latest stormwater management Best Management Practices (BMP). Due to the cost of achieving the required water quality improvements and historic interpretation of the intent of IDA designation by the Board, IDAs have been limited, largely, to commercial/office districts, industrial districts and high-density residential (townhouses and apartments) districts where economies of scale lend themselves to the installation of effective and affordable water quality protection.

Designating IDAs in areas characterized by detached, single-family homes is inconsistent with the historical application of the IDA option. Recognizing the issues that local governments are trying to address through the expansion of their IDAs, the Department staff offer the following regulatory alternatives for consideration by the Board to address the issues associated with nonconforming residential lots.

Alternatives:

1. Develop a new Residential Buffer Exemption Area (BEA) policy that would allow local governments to exempt portions of the Resource Protection Areas (RPA) from the building setback restrictions and buffer vegetation protection requirements included in the development criteria for the RPA (9 VAC 10-20-130) and the public notification and public hearing requirements included for exceptions (9 VAC 10-20-150). BEA approval would be based on the local government's ability to demonstrate that existing patterns of residential development in proposed BEAs prevents the buffer from properly functioning now and in the foreseeable future. BEA approval would be contingent upon the Board's approval of local mitigation policies that achieve equivalent water quality protection in the form of riparian buffer plantings, offsets, and fee-in-lieu programs.

2. Allow administrative review and approval of encroachments into the seaward 50-feet of the buffer area through the "permitted encroachments into the buffer area" (10-20-130 4) for the construction or expansion of principal and accessory structures on developed pre-Bay Act lots. The applicant would be required to demonstrate that there is no feasible alternative for minimizing or avoiding buffer encroachment. Administrative approval would be based, in part, upon the restoration of riparian buffer vegetation and/or other appropriate mitigation for water quality protection. Newly developed lots would not qualify.

3. Allow an administrative review and approval process through a new exceptions process (10-20-150) for the placement of accessory structures in the RPA on developed pre-Bay Act lots. The applicant would be required to demonstrate that there is no feasible alternative for minimizing or avoiding buffer encroachment. Administrative approval would be based, in part, upon the restoration of riparian buffer vegetation and/or other appropriate mitigation.

4. Retain existing IDA regulations. Reassess the need for additional regulatory relief for nonconforming lots at a later date.